09/998,551

FILE 'HOME' ENTERED AT 14:37:32 ON 16 SEP 2004

=> file biosis medline caplus wpids uspatfull
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'BIOSIS' ENTERED AT 14:37:54 ON 16 SEP 2004
Copyright (c) 2004 The Thomson Corporation.

FILE 'MEDLINE' ENTERED AT 14:37:54 ON 16 SEP 2004

FILE 'CAPLUS' ENTERED AT 14:37:54 ON 16 SEP 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'WPIDS' ENTERED AT 14:37:54 ON 16 SEP 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'USPATFULL' ENTERED AT 14:37:54 ON 16 SEP 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

*** YOU HAVE NEW MAIL ***

=> s surface plasmon resonance (L) hybridization
L1 2892 SURFACE PLASMON RESONANCE (L) HYBRIDIZATION

=> s l1 and (surface plasmon resonance or spr) (6a) organism?
L2 6 L1 AND (SURFACE PLASMON RESONANCE OR SPR) (6A) ORGANISM?

=> dup rem l2
PROCESSING COMPLETED FOR L2
L3 5 DUP REM L2 (1 DUPLICATE REMOVED)

=> d l3 bib abs 1-5

L3 ANSWER 1 OF 5 USPATFULL on STN
AN 2003:71354 USPATFULL
TI Label-free detection of nucleic acids via surface plasmon resonance
IN Nelson, Bryce P., Madison, WI, UNITED STATES
Liles, Mark R., Madison, WI, UNITED STATES
Frederick, Kendra, Madison, WI, UNITED STATES
Corn, Robert M., Madison, WI, UNITED STATES
Goodman, Robert M., Madison, WI, UNITED STATES
PI US 2003049639 A1 20030313
AI US 2001-998551 A1 20011129 (9)
RLI Continuation-in-part of Ser. No. US 1999-456038, filed on 3 Dec 1999, PENDING Division of Ser. No. US 1999-368991, filed on 5 Aug 1999, GRANTED, Pat. No. US 6127129
PRAI US 1999-132342P 19990504 (60)
DT Utility
FS APPLICATION
LREP DEWITT ROSS & STEVENS S.C., 8000 EXCELSIOR DR, SUITE 401, MADISON, WI, 53717-1914
CLMN Number of Claims: 27
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 1301
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed is a method to detect unlabeled nucleic acids (DNA and/or RNA) in a taxa, species, and organelle-specific fashion using **surface plasmon resonance** (SPR) imaging. Taxa-specific,

species-specific, or organelle-specific nucleic acids are affixed to an SPR-suitable substrate. A nucleic acid sample to be analyzed is then contacted with the SPR-substrate and the substrate analyzed to determine the presence or absence of specific **hybridization** between the nucleic acids bound to the substrate and the nucleic acids contained in the sample. The method does not require that either the bound nucleic acids nor the sample nucleic acids be labeled. The method can be used to identify the source of nucleic acids, their sequence, as well as to identify organisms and place them within a given taxonomic hierarchy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:278240 CAPLUS
DN 140:140130
TI Biosensors based on nucleic acid interaction
AU Minunni, M.
CS Department of Chemistry, Biosensor Laboratory, University of Florence, Sesto Fiorentino (FI), 50019, Italy
SO Spectroscopy (Amsterdam, Netherlands) (2003), 17(2,3), 613-625
CODEN: SPIJDZ; ISSN: 0712-4813
PB IOS Press
DT Journal
LA English
AB DNA sensing is an emerging technol. based on **hybridization** reaction between an immobilized DNA probe and a mol. target, consisting of a probe complementary sequence in solution Many application have been developed in the field of environmental, food and clin. anal. **Surface plasmon resonance** and piezoelec. sensing are reported as transduction principles for DNA-based devices. These techniques are able to monitor in real-time and without the use of any label the **hybridization** reaction between nucleic acids. Particular attention is given to Genetically Modified Organism detection.
RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:78573 CAPLUS
DN 136:96862
TI Biosensor technology and surface plasmon resonance for real-time detection of genetically modified Roundup Ready soybean gene sequences
AU Feriotto, Giordana; Borgatti, Monica; Mischiati, Carlo; Bianchi, Nicoletta; Gambari, Roberto
CS Biotechnology Center, Ferrara University, Ferrara, 44100, Italy
SO Journal of Agricultural and Food Chemistry (2002), 50(5), 955-962
CODEN: JAFCAU; ISSN: 0021-8561
PB American Chemical Society
DT Journal
LA English
AB Biospecific interaction anal. (BIA) was performed using **surface plasmon resonance** (SPR) and biosensor technologies to detect genetically modified Roundup Ready soybean gene sequences. We first immobilized, on SA sensor chips, single-stranded biotinylated oligonucleotides containing soybean lectin and Roundup Ready gene sequences, and the efficiency of **hybridization** to oligonucleotide probes differing in length was determined Second, we immobilized biotinylated PCR products from nontransgenic soybeans (genomes carrying only the lectin gene), as well as from genetically modified Roundup Ready soybean, and we injected the oligonucleotide probes. Furthermore, we used the sensor chips carrying either lectin and Roundup Ready soybean PCR products or 21-mer oligonucleotide as probes, and we injected both nonpurified and purified asym. PCR products. The results obtained show that 13 and 15 mer oligonucleotides are suitable probes to detect genetically modified Roundup Ready soybean gene sequences (either target oligonucleotides or

PCR products) under standard BIA exptl. conditions. By contrast, when 11 mer DNA probes were employed, no efficient **hybridization** was obtained. All the SPR-based formats were found to be useful for detection of Roundup Ready gene sequences, suggesting that these procedures are useful for the real-time monitoring of **hybridization** between target single-stranded PCR products, obtained by using as substrates DNA isolated from normal or transgenic soybeans, and oligonucleotide or PCR-generated probes, therefore enabling a one-step, nonradioactive protocol to perform detection.

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 5 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
DUPLICATE 1
AN 2002:234825 BIOSIS
DN PREV200200234825
TI **Surface plasmon resonance** biosensor for genetically modified **organisms** detection.
AU Mariotti, Elisa; Minunni, Maria [Reprint author]; Mascini, Marco
CS Dipartimento di Chimica, Universita degli Studi di Firenze, Via G. Capponi 9, 50121, Firenze, Italy
minunni@unifi.it
SO Analytica Chimica Acta, (25 February, 2002) Vol. 453, No. 2, pp. 165-172. print.
CODEN: ACACAM. ISSN: 0003-2670.
DT Article
LA English
ED Entered STN: 10 Apr 2002
Last Updated on STN: 10 Apr 2002
AB The development of a surface plasmon resonance (SPR) affinity biosensor based on DNA hybridisation is described. This biosensor has been applied to genetically modified organisms (GMOs) detection. Single stranded DNA (ssDNA) probes were immobilised on the sensor chip of an SPR device and the hybridisation between the immobilised probe and the complementary sequence (target) was monitored. The probe sequences were internal to the sequence of 35S promoter and NOS terminator which are inserted sequences in the genome of GMO regulating the transgene expression. The system has been optimised using synthetic oligonucleotides, then applied to real samples analysis. Samples, containing the transgenic target sequences, were amplified by polymerase chain reaction (PCR) and then detected with the SPR biosensor.

L3 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:419961 CAPLUS
DN 137:347039
TI **Surface plasmon resonance** (**SPR**) biosensor for genetically modified **organisms** (GMOs) detection
AU Mariotti, Elisa; Minunni, Maria; Mascini, Marco
CS Dipartimento di Chimica, Universita degli Studi di Firenze, Florence, 50121, Italy
SO Sensors and Microsystems, Proceedings of the Italian Conference, 6th, Pisa, Italy, Feb. 5-7, 2001 (2002), Meeting Date 2001, 3-7. Editor(s): Di Natale, Corrado; D'Amico, Arnaldo; Dario, Paolo. Publisher: World Scientific Publishing Co. Pte. Ltd., Singapore, Singapore.
CODEN: 69CPLZ; ISBN: 981-02-4895-4
DT Conference
LA English
AB The development of a **Surface Plasmon Resonance** (SPR) affinity biosensor based on DNA **hybridization** is described. This biosensor has been applied to Genetically Modified Organisms (GMOs) detection. Single standed DNA (ssDNA) probes were immobilized on the sensor chip of an SPR device and the **hybridization** between the immobilized probe and the complementary sequence (target) was monitored. The probe sequences were internal to the

35S promoter and NOS terminator sequences which are inserted in the genome of GMO regulating the transgene expression. The system has been optimized using synthetic oligonucleotides, then applied to real samples anal. Samples, containing the transgenic target sequences, were amplified by Polymerase Chain Reaction (PCR) and then detected with the SPR biosensor.

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=>

```
=> d his

     (FILE 'HOME' ENTERED AT 14:37:32 ON 16 SEP 2004)

     FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 14:37:54 ON
     16 SEP 2004
L1          2892 S SURFACE PLASMON RESONANCE (L) HYBRIDIZATION
L2             6 S L1 AND (SURFACE PLASMON RESONANCE OR SPR) (6A) ORGANISM?
L3             5 DUP REM L2 (1 DUPLICATE REMOVED)

=> s l1 not l3
L4          2887 L1 NOT L3

=> dup rem l4
PROCESSING IS APPROXIMATELY  44% COMPLETE FOR L4
PROCESSING IS APPROXIMATELY  80% COMPLETE FOR L4
PROCESSING COMPLETED FOR L4
L5          2784 DUP REM L4 (103 DUPLICATES REMOVED)

=> s l5 and (surface plasmon or spr) (30a) organism?
L6            18 L5 AND (SURFACE PLASMON OR SPR) (30A) ORGANISM?

=> d l6 bib abs 1-18

L6   ANSWER 1 OF 18  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2003:776459  CAPLUS
DN   140:369470
TI   Bulk acoustic wave affinity biosensor for genetically modified organisms
     detection
AU   Mannelli, Ilaria; Minunni, Maria; Tombelli, Sara; Mascini, Marco
CS   Universita degli Studi di Firenze, Dipartimento di Chimica, Florence,
     Italy
SO   IEEE Sensors Journal (2003), 3(4), 369-375
     CODEN: ISJEAZ; ISSN: 1530-437X
PB   Institute of Electrical and Electronics Engineers
DT   Journal
LA   English
AB   Bulk acoustic waves have been applied as affinity sensors.  In particular,
     a nucleic acid sensor for hybridization studies has been
     developed and applied for detecting DNA target sequences in solution  A DNA
     probe is immobilized on the sensor surface while the target sequence is
     free in solution; the interaction between the two complementary strands (
     hybridization) is followed in real-time, without the use of any
     label.  The system has been applied to anal. problems, i.e., genetically
     modified organisms (GMOs) detection.  The probe was complementary to
     characteristic DNA sequences present in GMOs.  The probe sequences were
     internal to the sequence of 35S promoter and Nos terminator that are
     inserted sequences in the genome of the GMO regulating the transgene
     expression.  Two different probe immobilization procedures were
     characterized to improve the performances of a piezoelec. crystal DNA
     sensor for GMOs detection: (1) thiol-dextran-streptavidin-biotin procedure
     and (2) thiol-derivatized probe and blocking thiol procedure.  The system
     has been optimized using synthetic oligonucleotides.  The probe
     immobilization step was monitored by a surface plasmon
     resonance system.
RE.CNT  12    THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 2 OF 18  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2002:98140  CAPLUS
DN   137:74024
TI   Surface plasmon resonance biosensor for genetically
     modified organisms detection
```

AU Mariotti, Elisa; Minunni, Maria; Mascini, Marco
CS Dipartimento di Chimica, Universita degli Studi di Firenze, Florence, 50121, Italy
SO Analytica Chimica Acta (2002), 453(2), 165-172
CODEN: ACACAM; ISSN: 0003-2670
PB Elsevier Science B.V.
DT Journal
LA English
AB The development of a **surface plasmon resonance** (SPR) affinity biosensor based on DNA **hybridization** is described. This biosensor has been applied to genetically modified organisms (GMOs) detection. Single stranded DNA (ssDNA) probes were immobilized on the sensor chip of an SPR device and the **hybridization** between the immobilized probe and the complementary sequence (target) was monitored. The probe sequences were internal to the sequence of 35S promoter and NOS terminator which are inserted sequences in the genome of GMO regulating the transgene expression. The system has been optimized using synthetic oligonucleotides, then applied to real samples anal. Samples, containing the transgenic target sequences, were amplified by polymerase chain reaction (PCR) and then detected with the SPR biosensor.
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 18 USPATFULL on STN
AN 2004:209335 USPATFULL
TI Polymorphisms in the human gene for the multidrug resistance-associated protein 1 (MRP-1) and their use in diagnostic and therapeutic applications
IN Brinkmann, Ulrich, Weilheim, GERMANY, FEDERAL REPUBLIC OF
Hoffmeyer, Sven, Eberfing, GERMANY, FEDERAL REPUBLIC OF
Mornhinweg, Ester, Weilheim, GERMANY, FEDERAL REPUBLIC OF
PI US 2004161768 A1 20040819
AI US 2003-627253 A1 20030724 (10)
RLI Continuation of Ser. No. WO 2002-EP794, filed on 25 Jan 2002, UNKNOWN
PRAI EP 2001-101651 20010126
DT Utility
FS APPLICATION
LREP FISH & NEAVE, 1251 AVENUE OF THE AMERICAS, 50TH FLOOR, NEW YORK, NY, 10020-1105
CLMN Number of Claims: 42
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 5244
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a polymorphic MRP-1 polynucleotide. Moreover, the invention relates to genes or vectors comprising the polynucleotides of the invention and to a host cell genetically engineered with the polynucleotide or gene of the invention. Further, the invention relates to methods for producing molecular variant polypeptides or fragments thereof, methods for producing cells capable of expressing a molecular variant polypeptide and to a polypeptide or fragment thereof encoded by the polynucleotide or the gene of the invention or which is obtainable by the method or from the cells produced by the method of the invention. Furthermore, the invention relates to an antibody which binds specifically the polypeptide of the invention. Moreover, the invention relates to a transgenic non-human animal. The invention also relates to a solid support comprising one or a plurality of the above mentioned polynucleotides, genes, vectors, polypeptides, antibodies or host cells. Furthermore, methods of identifying a polymorphism, identifying and obtaining a pro-drug or drug or an inhibitor are also encompassed by the present invention. In addition, the invention relates to methods for producing of a pharmaceutical composition and to methods of diagnosing a disease.

Further, the invention relates to a method of detection of the polynucleotide of the invention. Furthermore, comprised by the present invention are a diagnostic and a pharmaceutical composition. Even more, the invention relates to uses of the polynucleotides, genes, vectors, polypeptides or antibodies of the invention. Finally, the invention relates to a diagnostic kit.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 4 OF 18 USPATFULL on STN
AN 2004:133329 USPATFULL
TI Pyruvate:nadpand uses thereof
IN Cirpus, Petra, Mannheim, GERMANY, FEDERAL REPUBLIC OF
Lerchl, Jens, Svalof Weibull, GERMANY, FEDERAL REPUBLIC OF
Martin, William, Neuss, GERMANY, FEDERAL REPUBLIC OF
Rotte, Carmen, Muhltaler Str. 2, GERMANY, FEDERAL REPUBLIC OF
PI US 2004101865 A1 20040527
AI US 2003-343509 A1 20030131 (10)
WO 2001-EP9317 20010811
PRAI EP 2000-117730 20000817
DT Utility
FS APPLICATION
LREP NIXON & VANDERHYE, PC, 1100 N GLEBE ROAD, 8TH FLOOR, ARLINGTON, VA, 22201-4714
CLMN Number of Claims: 36
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 3656
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Provided are polynucleotides encoding Pyruvate:NADP+ oxidoreductases (PNO) as well as methods for obtaining the same. Furthermore, vectors comprising said polynucleotides are described, wherein the polynucleotides are operatively linked to expression control sequences allowing the expression in prokaryotic and/or eukaryotic host cells. In addition, polypeptides encoded by said polynucleotides, antibodies to said polypeptides and methods for their production are provided. Further described are methods for increasing the acetyl CoA synthesis as well as methods for the production of fatty acids, carotenoids, isoprenoids, vitamins, lipids, wax esters, (poly)saccharides and/or polyhydroxyalkanoates, or its metabolism products, in particular, steroid hormones, prostaglandin, cholesterol, triacylglycerols, bile acids or ketone bodies, comprising the expression of the polynucleotide or polypeptide described herein in a host cell or plant cell, plant tissue or plant. Methods for the identification of compounds being capable of activating or inhibiting PNO are described as well. Further, a pharmaceutical composition comprising the aforementioned inhibiting compounds and antibodies is described. Furthermore, transgenic plants, plant tissues, and plant cells containing the above described polynucleotides and vectors are described as well as the use of the mentioned polynucleotides, vectors, polypeptides, antibodies, and/or compounds identified by the method of the invention in the production of acetyl CoA metabolism products, e.g., fatty acids, carotenoids, isoprenoids, vitamins, lipids, (poly)saccharides, wax esters, and/or polyhydroxyalkanoates, and/or its metabolism products, in particular, steroid hormones, prostaglandin, cholesterol, triacylglycerols, bile acids and/or ketone bodies and pharmaceutical compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 5 OF 18 USPATFULL on STN
AN 2004:96512 USPATFULL
TI Cyclin-dependent kinase inhibitors and uses thereof
IN Inze, Dirk, Moorsel-Aalst, BELGIUM
Veylder, Lieven De, Aalst, BELGIUM

Almeida, Janice De, Bellem, BELGIUM
Landrieu, Isabelle, Wiers, BELGIUM
PI US 2004073969 A1 20040415
AI US 2003-688291 A1 20031017 (10)
RLI Division of Ser. No. US 2000-526597, filed on 16 Mar 2000, PENDING
Continuation of Ser. No. WO 1998-EP5895, filed on 16 Sep 1998, UNKNOWN
PRAI EP 1997-204111 19971224
EP 1997-202838 19970916
DT Utility
FS APPLICATION
LREP Ann R. Pokalsky, Esq., DILWORTH & BARRESE, LLP, 333 Earle Ovington Blvd., Uniondale, NY, 11553
CLMN Number of Claims: 42
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 2841
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Provided are DNA sequences encoding cyclin-dependent kinase inhibitor(s) as well as to methods for obtaining the same. Furthermore, vectors comprising said DNA sequences are described, wherein the DNA sequences are operatively linked to regulatory elements allowing expression in prokaryotic and/or eukaryotic host cells. In addition, proteins encoded by said DNA sequences, antibodies to said proteins and methods for their production are provided. Furthermore, regulatory sequences which naturally regulate the expression of the above described DNA sequences are described. Also described is a method for controlling or altering growth characteristics of a plant and/or a plant cell comprising introduction and/or expression of one or more cyclin-dependent kinase inhibitor(s) functional in a plant or parts thereof and/or one or more DNA sequences encoding such proteins. Also provided is a process for disruption plant cell division by interfering in the expression or activity of a cyclin-dependent protein kinase inhibitor using a DNA sequence according to the invention wherein said plant cell is part of a transgenic plant. Further described are diagnostic compositions comprising the aforementioned DNA sequences, proteins, antibodies and regulatory sequences. Methods for the identification of compounds being capable of activating or inhibiting the cyclin-dependent kinase inhibitors are described as well. Furthermore, transgenic plant cells, plant tissue and plants containing the above-described DNA sequences and vectors are described as well as the use of the aforementioned DNA sequences, vectors, proteins, antibodies, regulatory sequences and/or compounds identified by the method of the invention in plant cell and tissue culture, plant breeding and/or agriculture.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 6 OF 18 USPATFULL on STN
AN 2004:72674 USPATFULL
TI Cyclin-dependent kinase inhibitors and uses thereof
IN Inze, Dirk, Moorsel-Aalst, BELGIUM
De Veylder, Lieven, Aalst, BELGIUM
De Almeida, Janice, Bellem, BELGIUM
Landrieu, Isabelle, Wiers, BELGIUM
PA CropDesign N.V., Ghent, BELGIUM (non-U.S. corporation)
PI US 6710227 B1 20040323
AI US 2000-526597 20000316 (9)
RLI Continuation of Ser. No. WO 1998-EP5895, filed on 16 Sep 1998
DT Utility
FS GRANTED
EXNAM Primary Examiner: McElwain, Elizabeth F.; Assistant Examiner: Collins, Cynthia
LREP Pokalsky, Ann R., Dilworth & Barrese, LLP
CLMN Number of Claims: 26
ECL Exemplary Claim: 1,2,9

DRWN 1 Drawing Figure(s); 2 Drawing Page(s)
LN.CNT 2809
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Provided are DNA sequences encoding cyclin-dependent kinase inhibitor(s) as well as to methods for obtaining the same. Furthermore, vectors comprising said DNA sequences are described, wherein the DNA sequences are operatively linked to regulatory elements allowing expression in prokaryotic and/or eukaryotic host cells. In addition, proteins encoded by said DNA sequences, antibodies to said proteins and methods for their production are provided. Furthermore, regulatory sequences which naturally regulate the expression of the above described DNA sequences are described. Also described is a method for controlling or altering growth characteristics of a plant and/or a plant cell comprising introduction and/or expression of one or more cyclin-dependent kinase inhibitor(s) functional in a plant or parts thereof and/or one or more DNA sequences encoding such proteins. Also provided is a process for disruption plant cell division by interfering in the expression or activity of a cyclin-dependent protein kinase inhibitor using a DNA sequence according to the invention wherein said plant cell is part of a transgenic plant. Further described are diagnostic compositions comprising the aforementioned DNA sequences, proteins, antibodies and regulatory sequences. Methods for the identification of compounds being capable of activating or inhibiting the cyclin-dependent kinase inhibitors are described as well. Furthermore, transgenic plant cells, plant tissue and plants containing the above-described DNA sequences and vectors are described as well as the use of the aforementioned DNA sequences, vectors, proteins, antibodies, regulatory sequences and/or compounds identified by the method of the invention in plant cell and tissue culture, plant breeding and/or agriculture.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 7 OF 18 USPATFULL on STN
AN 2004:18872 USPATFULL
TI Expression of polypeptides in chloroplasts, and compositions and methods for expressing same
IN Mayfield, Stephen P., Cardiff, CA, UNITED STATES
Franklin, Scott, Cardiff, CA, UNITED STATES
PI US 2004014174 A1 20040122
AI US 2003-422628 A1 20030423 (10)
PRAI US 2002-434957P 20021219 (60)
US 2002-375129P 20020423 (60)
DT Utility
FS APPLICATION
LREP GRAY CARY WARE & FREIDENRICH LLP, 4365 EXECUTIVE DRIVE, SUITE 1100, SAN DIEGO, CA, 92121-2133
CLMN Number of Claims: 207
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 5947
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods of producing one or more polypeptides in a plant chloroplast, including methods of producing polypeptides that specifically associate in a plant chloroplast to generate a functional protein complex, are provided. An isolated polynucleotide that includes (or encodes) a first ribosome binding sequence (RBS) operatively linked to a second RBS, such that the first RBS directs translation of a polypeptide in a prokaryote and the second RBS directs translation of the polypeptide in a chloroplast, also is provided, as is a vector containing such a polynucleotide, particularly a chloroplast vector and a chloroplast/prokaryote shuttle vector. Also provided is a synthetic polynucleotide, which is chloroplast codon biased. A plant cell that is genetically modified to contain a polynucleotide or vector as described above, as well as transgenic plants containing or derived from such a

genetically modified cell, are provide. Polypeptides encoded by a synthetic polynucleotide as described also are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 8 OF 18 USPATFULL on STN
AN 2004:3401 USPATFULL
TI Novel basal endosperm transfer cell layer (BELT) specific genes
IN Thompson, Richard D., Koln, GERMANY, FEDERAL REPUBLIC OF
Salamini, Francesco, Koln, GERMANY, FEDERAL REPUBLIC OF
Hueros, Gregorio, Madrid, SPAIN
PA Max-Planck-Gesellschaft zur Forderung der Wissenschaften eV, Berlin, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)
PI US 2004003427 A1 20040101
AI US 2003-422365 A1 20030423 (10)
RLI Division of Ser. No. US 2001-647376, filed on 26 Mar 2001, ABANDONED A 371 of International Ser. No. WO 1999-EP2063, filed on 26 Mar 1999, UNKNOWN
PRAI EP 1998-105628 19980327
DT Utility
FS APPLICATION
LREP BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747
CLMN Number of Claims: 45
ECL Exemplary Claim: 1
DRWN 14 Drawing Page(s)
LN.CNT 2003
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Described are nucleic acid molecules encoding basal endosperm transfer cell layer (BETL) specific proteins as well as regulatory sequences which naturally regulate the expression of such nucleic acid molecules. Vectors comprising said nucleic acid molecules, wherein the nucleic acid molecules are operatively linked to regulatory elements allowing expression in prokaryotic and/or eukaryotic host cells as well as proteins encoded by said nucleic acid molecules, antibodies to said proteins and methods for their production are provided. Described are also recombinant DNA molecules and vectors comprising said regulatory sequences as well as host cells transformed therewith. Furthermore, kits and diagnostic compositions comprising the aforementioned nucleic acid molecules, proteins, antibodies, regulatory sequences, recombinant DNA molecules and vectors as well as antibodies are provided. Also provided are methods for the identification of compounds being capable of activating or inhibiting the expression of BETL specific genes. Furthermore, transgenic plant cells, plant tissue and plants containing the above-described nucleic acid molecules, regulatory sequences, recombinant DNA molecules and vectors as well as the use of the aforementioned nucleic acid molecules, regulatory sequences, recombinant DNA molecules, vectors, proteins, antibodies, peptides and/or compounds identified by a method of the invention in plant cell and tissue culture, plant breeding and/or agriculture are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 9 OF 18 USPATFULL on STN
AN 2003:330208 USPATFULL
TI Molecules interacting with CASL (MICAL) polynucleotides, polypeptides, and methods of using the same
IN Kolodkin, Alex L., Baltimore, MD, UNITED STATES
Terman, Jon R., Baltimore, MD, UNITED STATES
Mao, Tiany, Parkville, MD, UNITED STATES
Pasterkamp, Ronald J., Baltimore, MD, UNITED STATES
Yu, Hung-Hsiang, Lynnwood, WA, UNITED STATES
PI US 2003232419 A1 20031218
AI US 2003-359012 A1 20030204 (10)
PRAI US 2002-354178P 20020204 (60)

US 2002-384302P 20020530 (60)
US 2002-388325P 20020613 (60)
DT Utility
FS APPLICATION
LREP LISA A. HAILE, J.D., PH.D., GRAY CARY WARE & FREIDENRICH LLP, Suite 1100, 4365 Executive Drive, San Diego, CA, 92121-2133
CLMN Number of Claims: 153
ECL Exemplary Claim: 1
DRWN 45 Drawing Page(s)
LN.CNT 10590
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides MICAL and MICAL-Like polypeptides and polynucleotides. Also provided are methods that for identifying agents that affect axon growth and placement. Furthermore, provided herein are methods for affecting axon growth and placement.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 10 OF 18 USPATFULL on STN
AN 2003:314469 USPATFULL
TI Growth differentiation factor receptors, agonists and antagonists thereof, and methods of using same
IN Lee, Se-Jin, Baltimore, MD, United States
McPherron, Alexandra C., Baltimore, MD, United States
PA The Johns Hopkins University School of Medicine, Baltimore, MD, United States (U.S. corporation)
PI US 6656475 B1 20031202
AI US 2000-626896 20000727 (9)
RLI Continuation-in-part of Ser. No. US 485046
PRAI US 1997-54461P 19970801 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Eyler, Yvonne; Assistant Examiner: Andres, Janet L.
LREP Gray Cary Ware & Freidenrich, LLP, Haile, Lisa A., Imbra, Richard J.
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 2 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 6570
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a substantially purified growth differentiation factor (GDF) receptor, including a GDF-8 (myostatin) receptor, as well as functional peptide portions thereof. In addition, the invention provides a virtual representation of a GDF receptor or a functional peptide portion thereof. The present invention also provides a method of modulating an effect of myostatin on a cell by contacting the cell with an agent that affects myostatin signal transduction in the cell. In addition, the invention provides a method of ameliorating the severity of a pathologic condition, which is characterized, at least in part, by an abnormal amount, development or metabolic activity of muscle or adipose tissue in a subject, by modulating myostatin signal transduction in a muscle cell or an adipose tissue cell in the subject. The invention also provides a method of modulating the growth of muscle tissue or adipose tissue in a eukaryotic organism by administering an agent that affects myostatin signal transduction to the organism.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 11 OF 18 USPATFULL on STN
AN 2003:306385 USPATFULL
TI Compositions and methods for inferring a response to statin
IN Frudakis, Tony N., Bradenton, FL, UNITED STATES
PI US 2003215819 A1 20031120
AI US 2002-188359 A1 20020701 (10)
PRAI US 2001-322478P 20010913 (60)

US 2001-310783P 20010807 (60)
US 2001-301867P 20010629 (60)
DT Utility
FS APPLICATION
LREP LISA A. HAILE, J.D., PH.D., GRAY CARYWARE & FREIDENRICH LLP, Suite 1100, 4365 Executive Drive, San Diego, CA, 92121-2133
CLMN Number of Claims: 24
ECL Exemplary Claim: 1
DRWN 1 Drawing Page(s)
LN.CNT 10200
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods for inferring a statin response of a human subject from a nucleic acid sample of the subject are provided, as are reagents such as oligonucleotide probes, primers, and primer pairs, which can be used to practice such methods. A method of inferring a statin response can be performed, for example, by identifying in a nucleic acid sample from a subject, a nucleotide occurrence of at least one statin response-related single nucleotide polymorphism (SNP) and/or at least one statin response-related haplotype in a cytochrome P450 gene and/or an HMG Co-A reductase gene.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 12 OF 18 USPATFULL on STN
AN 2003:300263 USPATFULL
TI Compositions and methods for detecting polymorphisms associated with pigmentation
IN Frudakis, Tony N., Bradenton, FL, UNITED STATES
PI US 2003211486 A1 20031113
AI US 2002-156995 A1 20020528 (10)
PRAI US 2002-346303P 20020102 (60)
US 2001-334674P 20011115 (60)
US 2001-344418P 20011026 (60)
US 2001-323662P 20010917 (60)
US 2001-310781P 20010807 (60)
US 2001-300187P 20010621 (60)
US 2001-293560P 20010525 (60)
DT Utility
FS APPLICATION
LREP GARY CARY WARE & FRIENDENRICH LLP, 4365 EXECUTIVE DRIVE, SUITE 1600, SAN DIEGO, CA, 92121-2189
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 13068
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to methods for inferring a genetic pigmentation trait of a human subject from a nucleic acid sample or a polypeptide sample of the subject, and compositions for practicing such methods. The methods of the invention are based, in part, on the identification of single nucleotide polymorphisms (SNPs) that, alone or in combination, allow an inference to be drawn as to a genetic pigmentation trait such as hair shade, hair color, eye shade, or eye color, and further allow an inference to be drawn as to race. A method of the invention can be performed, for example, by identifying in a nucleic acid sample at least one pigmentation-related haplotype allele of at least one pigmentation gene, and preferably a combination of pigmentation-related haplotypes alleles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 13 OF 18 USPATFULL on STN
AN 2003:296844 USPATFULL
TI Identification of a new member of the cytochrome P450 3A (CYP3A) gene

family: CYP3AX
IN Wojnowski, Leszek, Munich, GERMANY, FEDERAL REPUBLIC OF
Gellner, Klaus, Peissenberg, GERMANY, FEDERAL REPUBLIC OF
Eiselt, Regina, Eurasburg, GERMANY, FEDERAL REPUBLIC OF
PA Epidauros Biotechnologie AG, Bernried, GERMANY, FEDERAL REPUBLIC OF
(non-U.S. corporation)
PI US 6645745 B1 20031111
AI US 2000-583447 20000530 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Achutamurthy, Ponnathapu; Assistant Examiner: Pak, Yong D
LREP Fish & Neave, Haley, Jr., James F., Gunnison, Jane T.
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 8 Drawing Page(s)
LN.CNT 3133
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to polynucleotides encoding the CYP3AX protein and variants thereof. Further, the present invention also provides vectors comprising said polynucleotides, in particular vectors, wherein polynucleotides of the present invention are operatively linked to regulatory elements allowing expression in prokaryotic and/or eukaryotic host cells. In addition, the present invention relates to proteins encoded by said polynucleotides and antibodies specifically recognizing such proteins. The present invention also concerns transgenic non-human animals comprising the above-described polynucleotide or vectors. Moreover, the present invention relates to methods for identifying and obtaining drug candidates and inhibitors for therapy of disorders related to the malfunction of the CYP3AX genes as well as to methods of diagnosing the status of such disorders. The present invention also relates to methods for the identification of molecular variants of the CYP3AX polynucleotide or protein. The present invention furthermore provides pharmaceutical and diagnostic compositions comprising the above-described polynucleotides, vectors, proteins, antibodies, drugs and inhibitors obtainable by the above-described method. Said compositions are particularly useful for diagnosing and treating various diseases with drugs that are substrates, inhibitors or modulators of CYP3AX genes or their product.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 14 OF 18 USPATFULL on STN
AN 2003:159297 USPATFULL
TI STK15 (STK6) gene polymorphism and methods of determining cancer risk
IN Toland, Amanda E., Greenbrae, CA, UNITED STATES
Balmain, Allan, Tiburon, CA, UNITED STATES
PI US 2003108910 A1 20030612
AI US 2002-209324 A1 20020729 (10)
PRAI US 2001-308911P 20010727 (60)
US 2001-334146P 20011128 (60)
DT Utility
FS APPLICATION
LREP GARY CARY WARE & FRIENDENRICH LLP, 4365 EXECUTIVE DRIVE, SUITE 1600, SAN DIEGO, CA, 92121-2189
CLMN Number of Claims: 30
ECL Exemplary Claim: 1
DRWN 7 Drawing Page(s)
LN.CNT 2661
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides methods for determining cancer susceptibility in a human subject by identifying in a nucleic acid sample from the subject, a nucleotide occurrence of a single nucleotide polymorphism (SNP) of the STK15 gene, including the STK15 Ile31

polymorphism. The invention provides isolated polynucleotides, polypeptides, specific binding pair members, and cells useful for identifying agents that affect tumor susceptibility. Furthermore, the invention provides methods for detecting low penetrance tumor susceptibility genes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 15 OF 18 USPATFULL on STN
AN 2002:294714 USPATFULL
TI Plant proteins
IN Hemerly, Adriana Silva, Rio De Janeiro, RJ, BRAZIL
Ferreira, Paulo Cavalcanti Gomes, Rio De Janeiro, BRAZIL
Rombauts, Stephane, Gent, BELGIUM
PA CropDesign N.V, GENT, BELGIUM, 9052 (non-U.S. corporation)
PI US 2002164757 A1 20021107
AI US 2002-36492 A1 20020107 (10)
RLI Continuation of Ser. No. WO 2000-EP6401, filed on 5 Jul 2000, UNKNOWN
PRAI EP 1999-202214 19990705
DT Utility
FS APPLICATION
LREP MICHAEL BEST & FRIEDRICH, LLP, ONE SOUTH PINCKNEY STREET, P O BOX 1806, MADISON, WI, 53701
CLMN Number of Claims: 28
ECL Exemplary Claim: 1
DRWN 17 Drawing Page(s)
LN.CNT 1655
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to at least partially purified protein, capable of modulating the DNA replication in plants, muteins thereof, DNA coding therefor and to a method to confer to one or more plant cells the capacity to provide such a protein or mutein. The invention also relates to plants, comprising the said DNA and the progeny thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 16 OF 18 USPATFULL on STN
AN 2002:287616 USPATFULL
TI Identification of a new member of the cytochrome P450 3A (CYP3A): gene family: CYP3AX
IN Wojnowski, Leszek, Munich, GERMANY, FEDERAL REPUBLIC OF
Gellner, Klaus, Peissenberg, GERMANY, FEDERAL REPUBLIC OF
Eiselt, Regina, Eurasburg, GERMANY, FEDERAL REPUBLIC OF
PA Epidauros Biotechnologie AG, Bernried, GERMANY, FEDERAL REPUBLIC OF, 82347 (non-U.S. corporation)
PI US 2002160479 A1 20021031
AI US 2001-7814 A1 20011109 (10).
RLI Division of Ser. No. US 2000-583447, filed on 30 May 2000, PENDING
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 47
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 3189
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to polynucleotides encoding the CYP3AX protein and variants thereof. Further, the present invention also provides vectors comprising said polynucleotides, in particular vectors, wherein polynucleotides of the present invention are operatively linked to regulatory elements allowing expression in prokaryotic and/or eukaryotic host cells. In addition, the present invention relates to proteins encoded by said polynucleotides and antibodies specifically

recognizing such proteins. The present invention also concerns transgenic non-human animals comprising the above-described polynucleotide or vectors. Moreover, the present invention relates to methods for identifying and obtaining drug candidates and inhibitors for therapy of disorders related to the malfunction of the CYP3AX genes as well as to methods of diagnosing the status of such disorders. The present invention also relates to methods for the identification of molecular variants of the CYP3AX polynucleotide or protein. The present invention furthermore provides pharmaceutical and diagnostic compositions comprising the above-described polynucleotides, vectors, proteins, antibodies, drugs and inhibitors obtainable by the above-described method. Said compositions are particularly useful for diagnosing and treating various diseases with drugs that are substrates, inhibitors or modulators of CYP3AX genes or their product.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 17 OF 18 USPATFULL on STN
AN 2002:281671 USPATFULL
TI Use of follistatin to increase muscle mass
IN Lee, Se-Jin, Baltimore, MD, UNITED STATES
McPherron, Alexandra C., Baltimore, MD, UNITED STATES
PI US 2002157126 A1 20021024
AI US 2001-841730 A1 20010424 (9)
RLI Continuation-in-part of Ser. No. US 2000-626896, filed on 27 Jul 2000, PENDING Continuation-in-part of Ser. No. US 2000-485046, filed on 5 May 2000, PENDING A 371 of International Ser. No. WO 1998-US15598, filed on 28 Jul 1998, UNKNOWN
PRAI US 1997-54461P 19970801 (60)
DT Utility
FS APPLICATION
LREP Lisa A. Haile, GRAY CARY WARE & FREIDENRICH LLP, Suite 1600, 4365 Executive Drive, San Diego, CA, 92121-2189
CLMN Number of Claims: 42
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 7056
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a substantially purified growth differentiation factor (GDF) receptor, including a GDF-8 (myostatin) receptor, as well as functional peptide portions thereof. In addition, the invention provides a virtual representation of a GDF receptor or a functional peptide portion thereof. The present invention also provides a method of modulating an effect of myostatin on a cell by contacting the cell with an agent that affects myostatin signal transduction in the cell. In addition, the invention provides a method of ameliorating the severity of a pathologic condition, which is characterized, at least in part, by an abnormal amount, development or metabolic activity of muscle or adipose tissue in a subject, by modulating myostatin signal transduction in a muscle cell or an adipose tissue cell in the subject. The invention also provides a method of modulating the growth of muscle tissue or adipose tissue in a eukaryotic organism by administering an agent that affects myostatin signal transduction to the organism.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 18 OF 18 USPATFULL on STN
AN 2002:60977 USPATFULL
TI Caspase homologue
IN Craen, Marc van de, Gent, BELGIUM
Declercq, Wim, Marke, BELGIUM
Vandenabeele, Peter, Sint-Amandsberg, BELGIUM
Fiers, Walter, Destelbergen, BELGIUM
PI US 2002034812 A1 20020321

US 6759227 B2 20040706
AI US 2001-764803 A1 20010117 (9)
RLI Continuation of Ser. No. WO 1999-EP4939, filed on 12 Jul 1999, UNKNOWN
PRAI EP 1998-202422 19980717
DT Utility
FS APPLICATION
LREP TRASK BRITT, P.O. BOX 2550, SALT LAKE CITY, UT, 84110
CLMN Number of Claims: 27
ECL Exemplary Claim: 1
DRWN 12 Drawing Page(s)
LN.CNT 1499

AB Caspases are cysteinyl aspartate-specific proteinases, many of which play a central role in apoptosis. This invention relates to the identification of a new murine caspase and its human homologue. The new molecules are most related to human/murine caspase-2 and human caspase-9 and possesses all the typical amino acid residues of the caspases involved in catalysis, including the QACRG box, and contains no or only a very short prodomain. Northern blot analysis revealed that mRNA expression of the new caspase is predominant in skin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>

```
=> d  his

     (FILE 'HOME' ENTERED AT 14:37:32 ON 16 SEP 2004)

     FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 14:37:54 ON
     16 SEP 2004
L1          2892 S SURFACE PLASMON RESONANCE (L) HYBRIDIZATION
L2             6 S L1 AND (SURFACE PLASMON RESONANCE OR SPR) (6A) ORGANISM?
L3             5 DUP REM L2 (1 DUPLICATE REMOVED)
L4          2887 S L1 NOT L3
L5          2784 DUP REM L4 (103 DUPLICATES REMOVED)
L6            18 S L5 AND (SURFACE PLASMON OR SPR) (30A) ORGANISM?

=> s biosensor (6a) organisms detection
L7             3 BIOSENSOR (6A) ORGANISMS DETECTION

=> d l7 bib abs 1-3

L7   ANSWER 1 OF 3  BIOSIS  COPYRIGHT (c) 2004 The Thomson Corporation.  on STN
AN   2002:234825  BIOSIS
DN   PREV200200234825
TI   Surface plasmon resonance biosensor for genetically modified
     organisms detection.
AU   Mariotti, Elisa; Minunni, Maria [Reprint author]; Mascini, Marco
CS   Dipartimento di Chimica, Universita degli Studi di Firenze, Via G. Capponi
     9, 50121, Firenze, Italy
     minunni@unifi.it
SO   Analytica Chimica Acta, (25 February, 2002) Vol. 453, No. 2, pp. 165-172.
     print.
     CODEN: ACACAM. ISSN: 0003-2670.
DT   Article
LA   English
ED   Entered STN: 10 Apr 2002
     Last Updated on STN: 10 Apr 2002
AB   The development of a surface plasmon resonance (SPR) affinity biosensor
     based on DNA hybridisation is described. This biosensor has been applied
     to genetically modified organisms (GMOs) detection. Single stranded DNA
     (ssDNA) probes were immobilised on the sensor chip of an SPR device and
     the hybridisation between the immobilised probe and the complementary
     sequence (target) was monitored. The probe sequences were internal to the
     sequence of 35S promoter and NOS terminator which are inserted sequences
     in the genome of GMO regulating the transgene expression. The system has
     been optimised using synthetic oligonucleotides, then applied to real
     samples analysis. Samples, containing the transgenic target sequences,
     were amplified by polymerase chain reaction (PCR) and then detected with
     the SPR biosensor.

L7   ANSWER 2 OF 3  CAPLUS  COPYRIGHT 2004 ACS on STN
AN   2003:776459  CAPLUS
DN   140:369470
TI   Bulk acoustic wave affinity biosensor for genetically modified
     organisms detection
AU   Mannelli, Ilaria; Minunni, Maria; Tombelli, Sara; Mascini, Marco
CS   Universita degli Studi di Firenze, Dipartimento di Chimica, Florence,
     Italy
SO   IEEE Sensors Journal (2003), 3(4), 369-375
     CODEN: ISJEAZ; ISSN: 1530-437X
PB   Institute of Electrical and Electronics Engineers
DT   Journal
LA   English
AB   Bulk acoustic waves have been applied as affinity sensors.  In particular,
     a nucleic acid sensor for hybridization studies has been developed and
     applied for detecting DNA target sequences in solution  A DNA probe is
```

immobilized on the sensor surface while the target sequence is free in solution; the interaction between the two complementary strands (hybridization) is followed in real-time, without the use of any label. The system has been applied to anal. problems, i.e., genetically modified organisms (GMOs) detection. The probe was complementary to characteristic DNA sequences present in GMOs. The probe sequences were internal to the sequence of 35S promoter and Nos terminator that are inserted sequences in the genome of the GMO regulating the transgene expression. Two different probe immobilization procedures were characterized to improve the performances of a piezoelec. crystal DNA sensor for GMOs detection: (1) thiol-dextran-streptavidin-biotin procedure and (2) thiol-derivatized probe and blocking thiol procedure. The system has been optimized using synthetic oligonucleotides. The probe immobilization step was monitored by a surface plasmon resonance system.

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:98140 CAPLUS
DN 137:74024
TI Surface plasmon resonance **biosensor** for genetically modified **organisms detection**
AU Mariotti, Elisa; Minunni, Maria; Mascini, Marco
CS Dipartimento di Chimica, Universita degli Studi di Firenze, Florence, 50121, Italy
SO Analytica Chimica Acta (2002), 453(2), 165-172
CODEN: ACACAM; ISSN: 0003-2670
PB Elsevier Science B.V.
DT Journal
LA English
AB The development of a surface plasmon resonance (SPR) affinity biosensor based on DNA hybridization is described. This biosensor has been applied to genetically modified organisms (GMOs) detection. Single stranded DNA (ssDNA) probes were immobilized on the sensor chip of an SPR device and the hybridization between the immobilized probe and the complementary sequence (target) was monitored. The probe sequences were internal to the sequence of 35S promoter and NOS terminator which are inserted sequences in the genome of GMO regulating the transgene expression. The system has been optimized using synthetic oligonucleotides, then applied to real samples anal. Samples, containing the transgenic target sequences, were amplified by polymerase chain reaction (PCR) and then detected with the SPR biosensor.

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2004 ACS on STN

AB Bulk acoustic waves have been applied as affinity sensors. In particular, a nucleic acid sensor for **hybridization** studies has been developed and applied for detecting DNA target sequences in solution A DNA probe is immobilized on the sensor surface while the target sequence is free in solution; the interaction between the two complementary strands (**hybridization**) is followed in real-time, without the use of any label. The system has been applied to anal. problems, i.e., genetically. . . and blocking thiol procedure. The system has been optimized using synthetic oligonucleotides. The probe immobilization step was monitored by a **surface plasmon resonance** system.

IT Biosensors
Genetically-modified organism
Mutation
Nucleic acid hybridization
Piezoelectric materials
Sound and Ultrasound
Surface plasmon resonance
(bulk acoustic wave affinity biosensor for genetically modified **organisms** detection)

```
=> d his

     (FILE 'HOME' ENTERED AT 14:37:32 ON 16 SEP 2004)

     FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 14:37:54 ON
     16 SEP 2004
L1          2892 S SURFACE PLASMON RESONANCE (L) HYBRIDIZATION
L2             6 S L1 AND (SURFACE PLASMON RESONANCE OR SPR) (6A) ORGANISM?
L3             5 DUP REM L2 (1 DUPLICATE REMOVED)
L4          2887 S L1 NOT L3
L5          2784 DUP REM L4 (103 DUPLICATES REMOVED)
L6            18 S L5 AND (SURFACE PLASMON OR SPR) (30A) ORGANISM?
L7             3 S BIOSENSOR (6A) ORGANISMS DETECTION

=> s biosensor?(15a) organisms
L8          141 BIOSENSOR?(15A) ORGANISMS

=> s l8 and hybridization?
L9           29 L8 AND HYBRIDIZATION?

=> s l9 not l7
L10          26 L9 NOT L7

=> dup rem l10
PROCESSING COMPLETED FOR L10
L11          22 DUP REM L10 (4 DUPLICATES REMOVED)

=> d l11 bib abs 1-22

L11  ANSWER 1 OF 22  USPATFULL on STN
AN     2004:184473  USPATFULL
TI     Modified luciferase nucleic acids and methods of use
IN     Patterson, Stacey, Tampa, FL, UNITED STATES
       Gupta, Rakesh, New Delhi, INDIA
       Sayler, Gary, Blaine, TN, UNITED STATES
       Dionisi, Hebe, Chubut, ARGENTINA
PI     US 2004142356      A1   20040722
AI     US 2003-697419     A1   20031030 (10)
PRAI   US 2002-422467P     20021030 (60)
DT     Utility
FS     APPLICATION
LREP   Stanley A. Kim, Ph.D., Esq., Akerman Senterfitt, Suite 400, 222 Lakeview
       Avenue, West Palm Beach, FL, 33402-3188
CLMN   Number of Claims: 26
ECL    Exemplary Claim: 1
DRWN   3 Drawing Page(s)
LN.CNT 1477
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     The luxA and luxB genes from P. luminescens which encode for the
       luciferase protein of the bacterial luciferase system were modified to
       generate codon-optimized versions that are optimized for expression in
       mammalian cells. The codon-optimized bacterial luciferase enzyme system
       genes of the invention can be used to develop a mammalian
       bioluminescence bioreporter useful in various medical research and
       diagnostics applications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11  ANSWER 2 OF 22  USPATFULL on STN
AN     2004:18826  USPATFULL
TI     Long wavelength engineered fluorescent proteins
IN     Wachter, Rebekka M., Creswell, OR, UNITED STATES
       Remington, S. James, Eugene, OR, UNITED STATES
```

PI US 2004014128 A1 20040122
AI US 2003-620099 A1 20030714 (10)
RLI Division of Ser. No. US 2000-575847, filed on 19 May 2000, GRANTED, Pat. No. US 6593135 Continuation-in-part of Ser. No. US 1997-974737, filed on 19 Nov 1997, GRANTED, Pat. No. US 6077707 Continuation of Ser. No. US 1997-911825, filed on 15 Aug 1997, GRANTED, Pat. No. US 6054321 Continuation-in-part of Ser. No. US 1996-706408, filed on 30 Aug 1996, GRANTED, Pat. No. US 6124128
PRAI US 1996-24050P 19960816 (60)
DT Utility
FS APPLICATION
LREP Lisa A. Haile, J.D., Ph.D., GRAY CARY WARE & FREIDENRICH LLP, Suite 1100, 4365 Executive Drive, San Diego, CA, 92121-2133
CLMN Number of Claims: 187
ECL Exemplary Claim: 1
DRWN 62 Drawing Page(s)
LN.CNT 3919
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Engineered fluorescent proteins, nucleic acids encoding them and methods of use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 3 OF 22 USPATFULL on STN
AN 2004:135646 USPATFULL
TI Multifunctional and multispectral biosensor devices and methods of use
IN Vo-Dinh, Tuan, Knoxville, TN, United States
PA UT-Battelle, LC, Oak Ridge, TN, United States (U.S. corporation)
PI US 6743581 B1 20040601
WO 2000043552 20000727
AI US 2002-890047 20020429 (9)
WO 2000-US2051 20000125
RLI Continuation-in-part of Ser. No. US 1999-236758, filed on 25 Jan 1999, now abandoned
DT Utility
FS GRANTED
EXNAM Primary Examiner: Forman, B. J.
LREP Akerman Senterfitt
CLMN Number of Claims: 28
ECL Exemplary Claim: 1
DRWN 13 Drawing Figure(s); 10 Drawing Page(s)
LN.CNT 3867
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An integrated biosensor system for the simultaneously detection of a plurality of different types of targets includes at least one sampling platform, the sampling platform including a plurality of receptors for binding to the targets. The plurality of receptors include at least one protein receptor and at least one nucleic acid receptor. At least one excitation source of electromagnetic radiation at a first frequency is provided for irradiating the receptors, wherein electromagnetic radiation at a second frequency different from the first frequency is emitted in response to irradiating when at least one of the different types of targets are bound to the receptor probes. An integrated circuit detector system having a plurality of detection channels is also provided for detecting electromagnetic radiation at said second frequency, the detection channels each including at least one detector.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 4 OF 22 USPATFULL on STN
AN 2003:237907 USPATFULL
TI Compositions and methods for the therapy and diagnosis of colon cancer
IN King, Gordon E., Shoreline, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES

Xu, Jiangchun, Bellevue, WA, UNITED STATES
Secrist, Heather, Seattle, WA, UNITED STATES
Jiang, Yuqiu, Kent, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2003166064 A1 20030904
AI US 2002-99926 A1 20020314 (10)
RLI Continuation-in-part of Ser. No. US 2001-33528, filed on 26 Dec 2001, PENDING Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul 2001, PENDING
PRAI US 2001-302051P 20010629 (60)
US 2001-279763P 20010328 (60)
US 2000-223283P 20000803 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 8531
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 5 OF 22 USPATFULL on STN
AN 2003:225726 USPATFULL
TI Nucleic acid biosensor diagnostics
IN Krull, Ulrich J., Mississauga, CANADA
Piunno, Paul A., Mississauga, CANADA
Hudson, Robert H.E., London, CANADA
Damha, Masad, St. Hubert, CANADA
Uddin, Andre H., Georgetown, CANADA
PI US 2003157538 A1 20030821
AI US 2003-338787 A1 20030107 (10)
RLI Continuation of Ser. No. US 2000-446222, filed on 16 Feb 2000, GRANTED, Pat. No. US 6503711 A 371 of International Ser. No. WO 1998-CA402, filed on 30 Apr 1998, UNKNOWN
PRAI CA 1997-2208165 19970618
US 1997-50970P 19970619 (60)
DT Utility
FS APPLICATION
LREP GREENLEE WINNER AND SULLIVAN P C, 5370 MANHATTAN CIRCLE, SUITE 201, BOULDER, CO, 80303
CLMN Number of Claims: 30
ECL Exemplary Claim: 1
DRWN 44 Drawing Page(s)
LN.CNT 3259
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A biosensor for direct analysis of nucleic acid **hybridization** by use of an optical fiber functionalized with nucleic acid molecules and fluorescence transduction is disclosed. Nucleic acid probes are immobilized onto the surface of optical fibers and undergo **hybridization** with complementary nucleic acids introduced into the local environment of the sensor. **Hybridization** events are detected by the use of fluorescent compounds which bind into nucleic acid hybrids. The invention finds uses in detection and screening of

genetic disorders, viruses, and pathogenic microorganisms. Biotechnology applications include monitoring of gene cultures and gene expression and the effectiveness (e.g. dose-response) of gene therapy pharmaceuticals. The invention includes biosensor systems in which fluorescent molecules are connected to the immobilized nucleic acid molecules. The preferred method for immobilization of nucleic acids is by in-situ solid phase nucleic acid synthesis. Control of the refractive index of the immobilized nucleic acid is achieved by the support derivatization chemistry and the nucleic acid synthesis. The preferred optical fiber derivation yields a DNA coating of higher refractive index than the fiber core onto the fiber surface.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 6 OF 22 USPATFULL on STN
AN 2003:225697 USPATFULL
TI Customized oligonucleotide microchips that convert multiple genetic information to simple patterns, are portable and reusable
IN Mirzabekov, Andrei, Darien, IL, UNITED STATES
Guschin, Dmitry Y., Rockville, MD, UNITED STATES
Chik, Valentine, Woodridge, IL, UNITED STATES
Drobyshev, Aleksei, Elektrosol, RUSSIAN FEDERATION
Fotin, Alexander, Cambridge, MA, UNITED STATES
Yershov, Gennadiy, Hinsdale, IL, UNITED STATES
Lysov, Yuri, UNITED STATES
PI US 2003157509 A1 20030821
AI US 2002-212476 A1 20020805 (10)
RLI Division of Ser. No. US 1999-261115, filed on 3 Mar 1999, GRANTED, Pat. No. US 6458584 Continuation-in-part of Ser. No. US 1996-780026, filed on 23 Dec 1996, ABANDONED
DT Utility
FS APPLICATION
LREP BARNES & THORNBURG, 2600 CHASE PLAZA, 10 SOUTH LASALLE STREET, CHICAGO, IL, 60603
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 14 Drawing Page(s)
LN.CNT 1900
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to using customized oligonucleotide microchips as **biosensors** for the detection and identification of nucleic acids specific for different genes, **organisms** and/or individuals in the environment, in food and in biological samples. The microchips are designed to convert multiple bits of genetic information into simpler patterns of signals that are interpreted as a unit. Because of an improved method of hybridizing oligonucleotides from samples to microchips, microchips are reusable and transportable. For field study, portable laser or bar code scanners are suitable.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 7 OF 22 USPATFULL on STN
AN 2003:106233 USPATFULL
TI Compositions and methods for the therapy and diagnosis of pancreatic cancer
IN Benson, Darin R., Seattle, WA, UNITED STATES
Kalos, Michael D., Seattle, WA, UNITED STATES
Lodes, Michael J., Seattle, WA, UNITED STATES
Persing, David H., Redmond, WA, UNITED STATES
Hepler, William T., Seattle, WA, UNITED STATES
Jiang, Yuqiu, Kent, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2003073144 A1 20030417
AI US 2002-60036 A1 20020130 (10)

PRAI US 2001-333626P 20011127 (60)
US 2001-305484P 20010712 (60)
US 2001-265305P 20010130 (60)
US 2001-267568P 20010209 (60)
US 2001-313999P 20010820 (60)
US 2001-291631P 20010516 (60)
US 2001-287112P 20010428 (60)
US 2001-278651P 20010321 (60)
US 2001-265682P 20010131 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 14253
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly pancreatic cancer, are disclosed. Illustrative compositions comprise one or more pancreatic tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly pancreatic cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 8 OF 22 USPATFULL on STN
AN 2003:17397 USPATFULL
TI LONG WAVELENGTH ENGINEERED FLUORESCENT PROTEINS
IN Wachter, Rebekka M., Creswell, OR, UNITED STATES
Remington, S. James, Eugene, OR, UNITED STATES
PI US 2003013149 A1 20030116
US 6593135 B2 20030715
AI US 2000-575847 A1 20000519 (9)
RLI Continuation-in-part of Ser. No. US 1997-974737, filed on 19 Nov 1997, GRANTED, Pat. No. US 6077707 Continuation of Ser. No. US 1997-911825, filed on 15 Aug 1997, GRANTED, Pat. No. US 6054321 Continuation of Ser. No. US 1996-706408, filed on 30 Aug 1996, GRANTED, Pat. No. US 6124128
PRAI US 1996-24050P 19960816 (60)
DT Utility
FS APPLICATION
LREP Lisa A Haile Ph D, Gray Cary Ware & Freidenrich LLP, 4365 Executive Drive, Suite 1100, San Diego, CA, 92121-2133
CLMN Number of Claims: 187
ECL Exemplary Claim: 1
DRWN 63 Drawing Page(s)
LN.CNT 3752
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Engineered fluorescent proteins, nucleic acids encoding them and methods of use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 9 OF 22 USPATFULL on STN
AN 2003:6795 USPATFULL
TI Nucleic acid biosensor diagnostics
IN Krull, Ulrich J., 1920 Sandown Rd., Mississauga Ontario, CANADA L5M 2Z8
Piunno, Paul A., 963 Lovingston Crescent, Mississauga Ontario, CANADA L4W 3V7
Hudson, Robert H. E., 389 Dundas St., Apartment 507, London Ontario, CANADA N6B 3L5

Damha, Masad, 3166 Pierre - Thomas Hurteau, St. Hubert Quebec, CANADA J3Y 8N9
Uddin, Andre H., 3665 Adams Way, Suite 1608, Mississauga Ontario, CANADA L5A 4A3

PI US 6503711 B1 20030107
WO 9858079 19981223
AI US 2000-446222 20000216 (9)
WO 1998-CA402 19980430
PRAI CA 1997-2208165 19970618
US 1997-50970P 19970619 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Fredman, Jeffrey
LREP Greenlee, Winner and Sullivan, P.C.
CLMN Number of Claims: 61
ECL Exemplary Claim: 1
DRWN 50 Drawing Figure(s); 44 Drawing Page(s)
LN.CNT 3538
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A biosensor for direct analysis of nucleic acid hybridazation by use of an optical fiber functionalized with nucleic acid molecules and fluorescence transduction is disclosed. Nucleic acid probes are immobilized onto the surface of optical fibers and undergo **hybridization** with complementary nucleic acids introduced into the local environment of the sensor. **Hybridization** events are detected by the use of fluorescent compounds which bind into nucleic acid hybrids. The invention finds uses in detection and screening of genetic disorders, viruses, and pathogenic micoorganisms. Biotechnology applications include monitoring of gene cultures and gene expression and the effectiveness (e.g. dose-response) of gene therapy pharmaceuticals. The invention includes biosensor systems in which fluorescent molecules are connected to the immobilized nucleic acid molecules. The preferred method for immobilization of nucleic acids is by in situ solid phase nucleic acid synthesis. Control of the refractive index of the immobilized nucleic acid is achieved by the support derivatization chemistry and the nucleic acid synthesis. The preferred optical fiber derivation yields a DNA coating of higher refractive index than the fiber core onto the fiber surface.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:625875 CAPLUS
DN 139:327427
TI Microscale structure and function of anaerobic-aerobic granules containing glycogen accumulating organisms
AU Meyer, Rikke Louise; Saunders, Aaron Marc; Zeng, Raymond Jianxiong; Keller, Jurg; Blackall, Linda Louise
CS Department of Microbial Ecology, University of Aarhus, Aarhus, Den.
SO FEMS Microbiol. Ecol. (2003), 45(3), 253-261
CODEN: FMECEZ; ISSN: 0168-6496
PB Elsevier Science B.V.
DT Journal
LA English

AB The spatial arrangement and metabolic activity of Candidatus Competibacter phosphatis was studied in granular sludge from an anaerobic-aerobic sequencing batch reactor enriched for glycogen-accumulating organisms. In this process, the electron donor (acetate) and the electron acceptor (O) were supplied sequentially in each phase. The organism, identified by fluorescence in situ **hybridization**, was present throughout the granules; however, metabolic activity was limited to a 100-μm-thick layer immediately below the surface of the granules. To study the cause of this, O microsensors and a novel microscale biosensor for volatile fatty acids were used in conjunction with chemical staining for intracellular

storage polymers. It was found that the limited distribution of activity was caused by mass transport limitation of O into the granules during the aerobic phase.

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:952935 CAPLUS
DN 138:315222
TI Quartz crystal microbalance (QCM) affinity **biosensor** for genetically modified **organisms** (GMOs) detection
AU Mannelli, Ilaria; Minunni, Maria; Tombelli, Sara; Mascini, Marco
CS Dipartimento di Chimica, Universita degli Studi di Firenze, Sesto Fiorentino-Florence, 50019, Italy
SO Biosensors & Bioelectronics (2003), 18(2-3), 129-140
CODEN: BBIOE4; ISSN: 0956-5663
PB Elsevier Science Ltd.
DT Journal
LA English
AB A DNA piezoelec. sensor has been developed for the detection of genetically modified organisms (GMOs). Single stranded DNA (ssDNA) probes were immobilized on the sensor surface of a quartz crystal microbalance (QCM) device and the **hybridization** between the immobilized probe and the target complementary sequence in solution was monitored. The probe sequences were internal to the sequence of the 35S promoter (P) and Nos terminator (T), which are inserted sequences in the genome of GMOs regulating the transgene expression. Two different probe immobilization procedures were applied: (a) a thiol-dextran procedure and (b) a thiol-derivatized probe and blocking thiol procedure. The system has been optimized using synthetic oligonucleotides, which were then applied to samples of plasmidic and genomic DNA isolated from the pBI121 plasmid, certified reference materials (CRM), and real samples amplified by the polymerase chain reaction (PCR). The anal. parameters of the sensor have been investigated (sensitivity, reproducibility, lifetime etc.). The results obtained showed that both immobilization procedures enabled sensitive and specific detection of GMOs, providing a useful tool for screening anal. in food samples.

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
AN 2002:748741 CAPLUS
DN 137:244265
TI Customized oligonucleotide microchips as biosensors for the detection and identification of nucleic acids
IN Mirzabekov, Andrei; Guschin, Dmitry Y.; Chik, Valentine; Drobyshev, Aleksei; Fotin, Alexander; Yershov, Gennadiy; Lysov, Yuri
PA University of Chicago, USA
SO U.S., 47 pp., Cont.-in-part of U. S. Ser. No. 780,026, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6458584	B1	20021001	US 1999-261115	19990303
	WO 2000052208	A2	20000908	WO 2000-US5143	20000229
	WO 2000052208	A3	20020321		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1208222 A2 20020529 EP 2000-912055 20000229
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL

JP 2002538785 T2 20021119 JP 2000-602818 20000229

US 2003157509 A1 20030821 US 2002-212476 20020805

PRAI US 1996-780026 B2 19961223

US 1999-261115 A2 19990303

WO 2000-US5143 W 20000229

AB This invention relates to using customized oligonucleotide microchips as **biosensors** for the detection and identification of nucleic acids specific for different genes, **organisms** and/or individuals in the environment, in food and in biol. samples. More specifically, it relates to microchips for detection and classification of nitrifying bacteria. The microchips are designed to convert multiple bits of genetic information into simpler patterns of signals that are interpreted as a unit. Because of an improved method of hybridizing oligonucleotides from samples to microchips, microchips are reusable and transportable. For field study, portable laser or bar code scanners are suitable.

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 13 OF 22 USPATFULL on STN

AN 2002:272801 USPATFULL

TI Compositions and methods for the therapy and diagnosis of colon cancer

IN Stolk, John A., Bothell, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Chenault, Ruth A., Seattle, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES

PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

PI US 2002150922 A1 20021017

AI US 2001-998598 A1 20011116 (9)

PRAI US 2001-304037P 20010710 (60)
US 2001-279670P 20010328 (60)
US 2001-267011P 20010206 (60)
US 2000-252222P 20001120 (60)

DT Utility

FS APPLICATION

LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092

CLMN Number of Claims: 17

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 9233

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 14 OF 22 USPATFULL on STN

AN 2002:243051 USPATFULL

TI Compositions and methods for the therapy and diagnosis of ovarian cancer

IN Algate, Paul A., Issaquah, WA, UNITED STATES
Jones, Robert, Seattle, WA, UNITED STATES
Harlocker, Susan L., Seattle, WA, UNITED STATES

PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2002132237 A1 20020919
AI US 2001-867701 A1 20010529 (9)
PRAI US 2000-207484P 20000526 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 25718
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 15 OF 22 USPATFULL on STN
AN 2002:206168 USPATFULL
TI Multiple inducible gene regulation system
IN Dhadialla, Tarlochan Singh, Indianapolis, IN, UNITED STATES
Cress, Dean Ervin, Souderton, PA, UNITED STATES
Carlson, Glenn Richard, North Wales, PA, UNITED STATES
Hormann, Robert Eugene, Melrose Park, PA, UNITED STATES
Palli, Subba Reddy, Lansdale, PA, UNITED STATES
Kudla, Arthur John, Charlottesville, VA, UNITED STATES
Herzig, Ronald Phillip, JR., Barboursville, VA, UNITED STATES
Philip, Mohan, Charlottesville, VA, UNITED STATES
PI US 2002110861 A1 20020815
AI US 2001-965697 A1 20010927 (9)
PRAI US 2000-237446P 20001003 (60)
DT Utility
FS APPLICATION
LREP Woodcock Washburn Kurtz, Mackiewicz & Norris LLP, One Liberty Place - 46th Floor, Philadelphia, PA, 19103
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 3413
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to the field of biotechnology or genetic engineering. More specifically, the present invention relates to a multiple inducible gene regulation system that functions within cells to simultaneously control the quantitative expression of multiple genes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:78573 CAPLUS
DN 136:96862
TI Biosensor technology and surface plasmon resonance for real-time detection of genetically modified Roundup Ready soybean gene sequences
AU Feriotto, Giordana; Borgatti, Monica; Mischiati, Carlo; Bianchi, Nicoletta; Gambari, Roberto
CS Biotechnology Center, Ferrara University, Ferrara, 44100, Italy
SO Journal of Agricultural and Food Chemistry (2002), 50(5), 955-962
CODEN: JAFCAU; ISSN: 0021-8561

PB American Chemical Society
DT Journal
LA English
AB Biospecific interaction anal. (BIA) was performed using surface plasmon resonance (SPR) and biosensor technologies to detect genetically modified Roundup Ready soybean gene sequences. We first immobilized, on SA sensor chips, single-stranded biotinylated oligonucleotides containing soybean lectin and Roundup Ready gene sequences, and the efficiency of **hybridization** to oligonucleotide probes differing in length was determined Second, we immobilized biotinylated PCR products from nontransgenic soybeans (genomes carrying only the lectin gene), as well as from genetically modified Roundup Ready soybean, and we injected the oligonucleotide probes. Furthermore, we used the sensor chips carrying either lectin and Roundup Ready soybean PCR products or 21-mer oligonucleotide as probes, and we injected both nonpurified and purified asym. PCR products. The results obtained show that 13 and 15 mer oligonucleotides are suitable probes to detect genetically modified Roundup Ready soybean gene sequences (either target oligonucleotides or PCR products) under standard BIA exptl. conditions. By contrast, when 11 mer DNA probes were employed, no efficient **hybridization** was obtained. All the SPR-based formats were found to be useful for detection of Roundup Ready gene sequences, suggesting that these procedures are useful for the real-time monitoring of **hybridization** between target single-stranded PCR products, obtained by using as substrates DNA isolated from normal or transgenic soybeans, and oligonucleotide or PCR-generated probes, therefore enabling a one-step, nonradioactive protocol to perform detection.
RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:419961 CAPLUS
DN 137:347039
TI Surface plasmon resonance (SPR) **biosensor** for genetically modified **organisms** (GMOs) detection
AU Mariotti, Elisa; Minunni, Maria; Mascini, Marco
CS Dipartimento di Chimica, Universita degli Studi di Firenze, Florence, 50121, Italy
SO Sensors and Microsystems, Proceedings of the Italian Conference, 6th, Pisa, Italy, Feb. 5-7, 2001 (2002), Meeting Date 2001, 3-7. Editor(s): Di Natale, Corrado; D'Amico, Arnaldo; Dario, Paolo. Publisher: World Scientific Publishing Co. Pte. Ltd., Singapore, Singapore. CODEN: 69CPLZ; ISBN: 981-02-4895-4
DT Conference
LA English
AB The development of a Surface Plasmon Resonance (SPR) affinity biosensor based on DNA **hybridization** is described. This **biosensor** has been applied to Genetically Modified **Organisms** (GMOs) detection. Single standed DNA (ssDNA) probes were immobilized on the sensor chip of an SPR device and the **hybridization** between the immobilized probe and the complementary sequence (target) was monitored. The probe sequences were internal to the 35S promoter and NOS terminator sequences which are inserted in the genome of GMO regulating the transgene expression. The system has been optimized using synthetic oligonucleotides, then applied to real samples anal. Samples, containing the transgenic target sequences, were amplified by Polymerase Chain Reaction (PCR) and then detected with the SPR biosensor.
RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 18 OF 22 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 2
AN 2001:430357 BIOSIS
DN PREV200100430357

TI A piezoelectric affinity **biosensor** for Genetically Modified **Organisms** (GMOs) detection.
AU Minunni, M.; Tombelli, S.; Pratesi, S.; Piatti, P.; Bogani, P.; Buiatti, M.; Mascini, M. [Reprint author]
CS Dipartimento di Sanita Pubblica, Epidemiologia e Chimica Analitica Ambientale, Universita degli Studi di Firenze, Via G. Capponi, 9, 50121, Firenze, Italy
mascini@unifi.it
SO Analytical Letters, (April, 2001) Vol. 34, No. 6, pp. 825-840. print.
CODEN: ANALBP. ISSN: 0003-2719.
DT Article
LA English
ED Entered STN: 12 Sep 2001
Last Updated on STN: 22 Feb 2002
AB A piezoelectric affinity sensor, based on DNA hybridisation has been studied for applications to Genetically Modified Organisms (GMOs) detection. The thiol/dextran modified surfaces were coupled to streptavidin for immobilising 5'-biotinyltead probes (25-mer). The probes sequences were respectively internal to the amplified product of P35S and T-NOS. These target sequences were chosen on the base of their wide presence in GMOs. The system has been optimised using synthetic complementary oligonucleotides (25-mer) and the specificity of the system tested with a non-complementary oligonucleotide (23-mer). The hybridisation study was performed also with samples of DNA isolated from CRM (Certified Reference Materials) soybean powder containing 2% of transgenic material and amplified by PCR. Non amplified genomic or plasmidic DNA was also used. The developed system was very specific, binding only the complementary DNA strand. The CV% was 20% both with synthetic oligonucleotides and PCR amplified samples. The sensor signal was independent of the sample dilution but the system is still at a semi-quantitative level.

L11 ANSWER 19 OF 22 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 3
AN 2001:304000 BIOSIS
DN PREV200100304000
TI Electrochemical biosensors for evaluation of contaminants in food.
AU Mascini, Marco [Reprint author]; Palchetti, Ilaria
CS Dipartimento di Sanita Pubblica, Epidemiologia e Chimica Analitica Ambientale, Universita di Firenze, Via Gino Capponi 9, 50121, Firenze, Italy
mascini@unifi.it
SO Arhiv za Higijenu Rada i Toksikologiju, (March, 2001) Vol. 52, No. 1, pp. 49-59. print.
CODEN: AHRTAN. ISSN: 0004-1254.
DT Article
LA English
ED Entered STN: 27 Jun 2001
Last Updated on STN: 19 Feb 2002
AB This paper describes the application of electrochemical disposable biosensors in food analysis, which have recently been developed in our laboratory. Disposable biosensors, based on acetylcholinesterase inhibition activity, were exploited for testing the presence of organophosphorus and carbamate pesticides in water, fruit, and vegetable samples. The paper further describes preliminary tests for the detection of genetically modified **organisms** and **hybridization** by coupling the DNA **biosensors** with the polymerase chain reaction.

L11 ANSWER 20 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 4
AN 2000:628308 CAPLUS
DN 133:233547
TI Customized microchips that convert multiple genetic information to simpler patterns, are portable and reusable
IN Mirzabekov, Andrei; Guschin, Dmitry Y.; Chik, Valentine; Drobyshev,

Aleksei; Fotin, Alexander; Yershov, Gennadiy; Lysov, Yuri
PA The University of Chicago, USA
SO PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000052208	A2	20000908	WO 2000-US5143	20000229
	WO 2000052208	A3	20020321		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6458584	B1	20021001	US 1999-261115	19990303
	EP 1208222	A2	20020529	EP 2000-912055	20000229
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	JP 2002538785	T2	20021119	JP 2000-602818	20000229
PRAI	US 1999-261115	A2	19990303		
	US 1996-780026	B2	19961223		
	WO 2000-US5143	W	20000229		

AB This invention relates to using customized oligonucleotide microchips as **biosensors** for the detection and identification of the nucleic acids specific for different genes, **organisms** and/or individuals in the environment, in food and in biol. samples. The microchips are designed to convert multiple bits of genetic information into simpler patterns of signals that are interpreted as a unit. Because of an improved method of hybridizing oligonucleotides from samples to microchips, microchips are reusable and transportable. For example, mismatches between immobilized oligonucleotide and sample nucleic acids may be detected by using nonequil. melting curves. For field study, portable laser or bar code scanners are suitable. Thus, microchips were designed to detect HLA polymorphisms, β-thalassemia mutation, nitrifying microorganisms, Lyme disease-causing Borrelia burgdorferi, and Salmonella in food samples.

L11 ANSWER 21 OF 22 USPATFULL on STN
AN 2000:121286 USPATFULL
TI Bioluminescent bioreporter integrated circuit
IN Simpson, Michael L., Knoxville, TN, United States
Sayler, Gary S., Blaine, TN, United States
Paulus, Michael J., Knoxville, TN, United States
PA UT Battelle, LLC, Oak Ridge, TX, United States (U.S. corporation)
The University of Tennessee Research Corp., Knoxville, TX, United States (U.S. corporation)
PI US 6117643 20000912
AI US 1997-978439 19971125 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Chin, Christopher L.
LREP Williams, Morgan & Amerson, P.C.
CLMN Number of Claims: 32
ECL Exemplary Claim: 1
DRWN 43 Drawing Figure(s); 39 Drawing Page(s)
LN.CNT 5414
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are monolithic bioelectronic devices comprising a bioreporter

and an OASIC. These bioluminescent bioreporter integrated circuit are useful in detecting substances such as pollutants, explosives, and heavy-metals residing in inhospitable areas such as groundwater, industrial process vessels, and battlefields. Also disclosed are methods and apparatus for environmental pollutant detection, oil exploration, drug discovery, industrial process control, and hazardous chemical monitoring.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 22 OF 22 USPATFULL on STN
AN 1999:132528 USPATFULL
TI Method for detection of buried explosives using a biosensor
IN Burlage, Robert S., Knoxville, TN, United States
Patek, David R., Loudon, TN, United States
Everman, Kirk R., Knoxville, TN, United States
PA Lockheed Martin Energy Research Corp., TN, United States (U.S. corporation)
PI US 5972638 19991026
AI US 1997-792251 19970131 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Railey, II, Johnny F.
LREP Medlen & Carroll, LLP
CLMN Number of Claims: 39
ECL Exemplary Claim: 1
DRWN 5 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 1178
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a method for detecting buried explosives which exude vapors of the explosive chemical to the surface. A biological sensor that is applied on the surface produces a detectable signal when it is contacted by the explosive chemical, producing an identifiable pattern for pin-pointing the explosive. The biological sensor is a genetically altered organism.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>